

**Notice of Allowability**

Application No.

09/773,249

Applicant(s)

ITOH, SHIN-ICHI

Examiner

Quang N. Nguyen

Art Unit

2141

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed on 09/08/2005.
2. ☒ The allowed claim(s) is/are 1, 22 and 26.
3. ☒ The drawings filed on 14 May 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

***Examiner's Amendment***

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment maybe filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this Examiner's Amendment was given in a telephone interview with the Applicant's representative, Mr. Marshall Curtis, on October 27<sup>th</sup>, 2005.

3. Please amend claim 1 as below:

A network scanner apparatus ~~connected to a least one terminal via a network,~~  
comprising:

~~[[a]] control portion which controls the network by the use of a transmission control protocol and an Internet~~ means which controls a network by TCP/IP protocol;

~~[[a]] readout portion~~ means which ~~reads out~~ reads out a paper to produce an image data signal;

~~an operation portion~~ input means which inputs an ~~Internet protocol~~ IP address as a transmitting destination of the image data signal;

converting means which converts the IP address of the transmitting destination inputted by the input means into a MAC address by using address resolution protocol (ARP); and

~~a transmission portion which directly~~ communication means which transmits the image data signal obtained by the readout means to a terminal having the inputted IP address of the transmitting destination on the network by packet switching;

network storage means which registers an IP address of the network scanner itself that transmits the image data signal, a subnet mask and a default root;

judging means which judges whether or not an AND value between the IP address of the transmitting destination and the subnet mask is equal to an AND value between the IP address of the network scanner itself registered in the network storage means and the subnet mask;

default converting means which converts the IP address of the default root into the MAC address by using the address resolution protocol (ARP); and

router communication means which transmits the image data signal into a router having the IP address of the default root by the packet switching; wherein

when the AND values are equal to each other, the IP address of the transmitting destination is converted into the MAC address by the converting means and the image data signal is transmitted into the terminal having the IP address of the transmitting destination by the communication means, and

when the AND values are not equal to each other, the IP address of the default root is converted into the MAC address by the default converting means and the image data signal is transmitted into the router having the IP address of the default root by the router communication means.

4. Please cancel claims 2-21.

5. Please amend claim 22 as below:

[[A]] The network scanner apparatus as claimed in claim 1, further comprising:  
storing means which caches the MAC address converted by the converting means for a constant time;

wherein the IP address inputted by the input means is converted into the MAC address by the use of the MAC address cached in the storing means.

6. Please cancel claims 23-25.

7. Please amend claim 26 as below:

A computer-readable storage medium, storing a program executed by a network scanner apparatus which registers an IP address of a computer itself that transmits an image data signal, a subnet mask and a default root, comprising the steps of:

controlling a network by TCP/IP protocol;  
reading out a paper to produce an image data signal;  
inputting an IP address as a transmitting destination of the image data signal;  
converting the inputted IP address of the transmitting destination into a MAC address by using address resolution protocol (ARP);  
transmitting the image data signal into a terminal having the inputted IP address of the transmitting destination on the network by packet switching;

judging whether or not an AND value between the IP address of the transmitting destination and the subnet mask is equal to an AND value between the IP address of the computer itself and the subnet mask;

converting the IP address of the default root into the MAC address by using the address resolution protocol (ARP); and

transmitting the image data signal into a router terminal having the IP address of the default root by the packet switching; wherein

when the AND values are equal to each other, the IP address of the transmitting destination is converted into the MAC address and the image data signal is transmitted into the terminal having the IP address of the transmitting destination, and

when the AND values are not equal to each other, the IP address of the default root is converted into the MAC address and the image data signal is transmitted into the router having the IP address of the default root.

8. Pursuant to MPEP 606.01, the title has been changed to read:

-- SYSTEM FOR DIRECTLY TRANSMITTING AN IMAGE DATA SIGNAL FROM  
A SCANNER DEVICE TO A COMPUTER TERMINAL VIA A NETWORK  
WITHOUT USING A SERVER --

9. Claims 1, 22 and 26 are allowed.

10. The following is an examiner's statement of reasons for allowance:

In interpreting the claims, in light of the specification and the applicant's arguments filed on 09/08/2005, the Examiner finds the claimed invention to be patentably distinct from the prior art of record.

**Bashoura et al. (US 5,862,202)**, teach a fax routing system and method using a standard fax machine and personal computer, wherein a fax can actually be sent over the Internet to a recipient with an IP address using file transfer protocol (FTP) or with an Email address through servers maintained by others such as Independent Service Providers (ISPs) (**Bashoura**, Abstract and C4: L13-35).

**Stevens ("TCP/IP Illustrated, Volume 1 – The Protocols)**, teaches a method and system for transmitting packets on a communications network using the transmission control protocol (TCP) for the application layer, wherein TCP provides a connection oriented, reliable, byte stream service while using the TCP/IP as a network protocol (**Stevens**, Section 17.1 – Introduction, page 223).

However, the prior art of record fails to teach or suggest individually or in combination that a communication method and system for storing a program executable by a network scanner which registers an IP address of a computer itself that transmits an image data signal, a subnet mask and a default root, comprising the steps of: controlling a network by TCP/IP protocol; reading a paper to produce an image data signal; inputting an IP address as a transmitting destination of the image data signal; converting the inputted IP address of the transmitting destination into a MAC address by

using address resolution protocol (ARP); transmitting the image data signal into a terminal having the inputted IP address of the transmitting destination on the network by packet switching; judging whether or not an AND value between the IP address of the transmitting destination and the subnet mask is equal to an AND value between the IP address of the computer itself and the subnet mask; converting the IP address of the default root into the MAC address by using the address resolution protocol (ARP); and transmitting the image data signal into a router terminal having the IP address of the default root by the packet switching; wherein when the AND values are equal to each other, the IP address of the transmitting destination is converted into the MAC address and the image data signal is transmitted into the terminal having the IP address of the transmitting destination, and when the AND values are not equal to each other, the IP address of the default root is converted into the MAC address and the image data signal is transmitted into the router having the IP address of the default root as set forth in independent claims 1 and 26. Claims 1, 22 and 26 are allowed because of the combination of other limitations and the limitation listed above.

The examiner finds the Applicant's amendments of claims 1 and 26 patentably distinct from the prior art of record since the combination of prior art of records fail to disclose the features of the invention including registering an IP address of a computer itself that transmits an image data signal, a subnet mask and a default root; judging whether or not an AND value between the IP address of the transmitting destination and the subnet mask is equal to an AND value between the IP address of the computer itself and the subnet mask; wherein when the AND values are equal to each other, the IP

address of the transmitting destination is converted into the MAC address and the image data signal is transmitted into the terminal having the IP address of the transmitting destination, and when the AND values are not equal to each other, the IP address of the default root is converted into the MAC address and the image data signal is transmitted into the router having the IP address of the default root, as claimed in the invention to allow the direct communication between the network scanner and the network terminal without using the server device such as the mail server to reduce the introduction cost and operation cost in preparing the mail server and in service interruption caused by server-down because of high load (*the large size of the image data signal*) is applied to the mail server (see Specification, page 22, lines 9-22).


11. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Examiner's Amendment."



12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER